







- -Brownish in color.
- -Grooves on either side of spine on head and tail.
- -Medium length antennae.
- -Predominant in inshore waters in spring and summer.



## White Shrimp (Litopenaeus setiferus)

- -Grayish in color.
- -Less-pronounced grooves on head and tail.
- -Very long black antennae.
- -Predominant in inshore waters in summer through fall.



#### **Spawning Season**

Adult shrimp mate and spawn offshore while the female's shell is still soft following molting. Peak brown shrimp spawning activity takes place in spring and summer, while peak white shrimp spawning activity takes place in summer and fall. Eggs hatch offshore and larvae undergo approximately ten developmental stages during a two week period. Larvae have little swimming ability and rely on wind and tidal driven currents for transport into estuaries, which offer the habitat they are dependent upon for food, growth, and shelter throughout the early developmental and juvenile stages.

#### Habitat

As they develop, shrimp larvae move from offshore open waters into estuaries. Early juvenile shrimp associate closely with marsh edge habitats, flooded grasses, and aquatic vegetation in upper estuaries. Shrimp eventually leave shallow marsh edge habitats and become more bottom oriented, gradually moving into deeper waters such as bayous and open coastal lakes and bays. Shrimp return to offshore waters to mature and spawn. Juvenile and adult brown and white shrimp are most commonly associated with soft mud and bottoms holding large amounts of decaying vegetative material.

#### Diet

Larval shrimp consume plankton by filter feeding, but begin to feed on decaying organic matter on the bottom in later larval stages.

Juveniles have omnivorous diets including microorganisms, plant material, and small invertebrates.

Adult shrimp become more predatory, adding insect larvae and larger marine invertebrates to their diet.

## **Age and Growth**

Shrimp growth is rapid and they may reach harvestable sizes (100 shrimp per pound) in as little as two to three months under favorable environmental conditions. Because shrimp shells are rigid and can't expand or grow, shrimp grow through a process known as molting whereby the old shell is shed and a new shell is formed. Small shrimp may molt several times within a week, but as they become larger molting decreases with growth. Newly molted shrimp are highly vulnerable to predation and tend to seek shelter until their shell has hardened. Shrimp in the Gulf of Mexico are an annual crop and few live longer than one year of age.

# **Shrimp Fishery Management**

**LDWF** biologists monitor shrimp populations year-round to develop recommendations for shrimp season openings and closures, season extensions, and special shrimp seasons. These recommendations may differ among Louisiana's coastal basins as patterns in shrimp recruitment, growth, emigration, and water conditions can vary widely among basins. The most popular commercial methods of harvesting shrimp include the use of trawls, skimmer nets, and butterfly nets. Recreationally, fishermen generally harvest shrimp for both food and bait using trawls and cast nets.



Your purchase of fishing equipment and motor boat fuels supports Sport Fish Restoration and boating access facilities.

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# **Shrimp Species Quick Facts**

American citizens consumed over four pounds of shrimp each in 2011.

Louisiana is number one in commercial shrimp landings in the USA.

Over 92 million pounds of shrimp were landed in Louisiana in 2011.

Louisiana's shrimp industry accounts for over 14,000 jobs and an economic impact of 1.3 billion dollars annually.

Although Louisiana and the Gulf of Mexico is home to the largest and most valuable shrimp fishery in the USA, foreign shrimp imports comprise 90% of the shrimp consumed by Americans each year.

Seabob, pink shrimp, roughneck shrimp, rock shrimp, and royal red shrimp are also found in commercial catches along the Gulf Coast.

## **Shrimp Seasons**

Shrimp are harvested year-round in open waters of the Gulf of Mexico, but are managed by seasons within state waters. Seasons below indicate the predominant species harvested during that time, but both species are harvested throughout the year.

Season*	Brown Shrimp May through July	White Shrimp August through January
Peak Landings	May through June	October through November

<sup>\*</sup>Check for season and area closures at www.wlf.la.gov